

UNITED STATES DEPARTMENT OF COMMERCE

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 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.

 08/825,400
 03/28/97
 MURATA
 H
 040679/6439

E1M1/0107

FOLEY & LARDNER 3000 K STREET NW SUITE 500 PO BOX 25696 WASHINGTON DC 20007-8696 **EXAMINER** SODERQIST, K

ART UNIT PAPER NUMBER 2109

DATE MAILED:

01/07/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



Application No. 08/825,400 Applicant(s)

Office Action Summary

Examiner

Group Art Unit 2109 Kristina Soderquist

Murata et al.

Responsive to communication(s) filed on		
☐ This action is FINAL .		
☐ Since this application is in condition for allowance exce in accordance with the practice under <i>Ex parte Quayle</i> ,		n as to the merits is closed
A shortened statutory period for response to this action is is longer, from the mailing date of this communication. Fa application to become abandoned. (35 U.S.C. § 133). Ex 37 CFR 1.136(a).	lure to respond within the period	for response will cause the
Disposition of Claims		
X Claim(s) 1-11	is/a	are pending in the application.
Of the above, claim(s)	is/are	withdrawn from consideration.
Claim(s)		_ is/are allowed.
Claim(s)		
Claim(s)		
X Claims 1-11	are subject to restr	iction or election requirement.
☐ See the attached Notice of Draftsperson's Patent Drace ☐ The drawing(s) filed on	objected to by the Examiner. is approved cer. prity under 35 U.S.C. § 119(a)-(d).
received in Application No. (Series Code/Seria	Number)	
received in this national stage application from *Certified copies not received:	the International Bureau (PCT F	Rule 17.2(a)).
Acknowledgement is made of a claim for domestic p	oriority under 35 U.S.C. § 119(e).
Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Page Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PT Notice of Informal Patent Application, PTO-152		
SEE OFFICE ACTION	ON THE FOLLOWING PAGES	

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DETAILED ACTION

Election/Restriction

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4, drawn to a circuit board, classified in class 174, subclass 261.
 - II. Claims 5-8, drawn to a method of producing a circuit board, classified in class 29, subclass 843.
 - III. Claims 8-10, drawn to a flattening and leveling jib, classified in class 164, subclass 271.
- 2. The inventions are distinct, each from the other because of the following reasons: Inventions of Group II and Group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process. For example, the step of forming the bumps to the proper height could be accomplished by pressing the bumps to the desired height, grinding the bumps to the desired height, or merely forming the bumps at the desired height.
- 3. Inventions of Group III and Group I are related as apparatus and product made.

 The inventions in this relationship are distinct if either or both of the following can be shown: (1)

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that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product as claimed can be made by another and materially different apparatus. For example, the particular height of the bumps could be obtained by using a grinder or grinding machine (specification, page 21, lines 19-30).

- 4. Inventions of Group II and Group III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by another materially different apparatus. For example, the forming of the bumps could be accomplished by a grinder or grinding machine (as evidenced by claims 7 and page 21, liens 19-30 of the specification), as opposed to the claimed apparatus (the flattening and leveling jig).
- 5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 6. Because these inventions are distinct for the reasons given above and the search required for Group III is not required for Groups I or II, and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

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7. A telephone call was made to Mr. Quillin (Examiner spoke with Mr. Quillin's secretary

and was notified the restriction requirement should be mailed out) on December 15, 1997, to

request an oral election to the above restriction requirement, but did not result in an election being

made.

Applicant is advised that the response to this requirement to be complete must include an

election of the invention to be examined even though the requirement be traversed (37

CFR 1.143).

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the

inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

named inventors is no longer an inventor of at least one claim remaining in the application. Any

amendment of inventorship must be accompanied by a diligently-filed petition under 37

CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

Communication

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Kristina Soderquist whose telephone number is (703) 305-6318.

Examiner Soderquist's supervisor, Mrs. Kristine Kincaid, can be reached at (703) 308-

0640.

Vaistine / Kincaid
KRISTINE L. KINCAID

PERVISORY PATENT EXAMINER

GROUP 2100

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